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Test Report of Cement Concrete Cubes

IS: 516-1959 (Method of tests for strength of Concrete C1.5) — **Date: 21-012021**

Name of Work : Providing and Fixing LED lights at Yelahanka Division

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. Madhusudhan A N M/s Suraksha Electricals
Customer Reference	EE(PROJECT)/YNK ZONE/WO/89/2020-21
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	24-12-2020
Sample Type	Footing
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 28 Days Compressive Strength
Date of Test	21-01-2021
Location	

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Trsting	Dimension of Specification	Cross sectional area	Maximum Load in	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	KN	N/mm^2	N/mm^2
1	Footing	M20	24-12-2020	21-01-2021	150x150x150	22500	702	26.4	26.21
2	Footing	M20	24-12-2020	21-01-2021	150x150x150	22500	695	26.9	
3	Footing	M20	24-12-2020	21-01-2021	150x150x150	22500	699	25.4	

Remarks :

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Contractor	Sri. Madhusudhan A N M/s Suraksha Electricals
Customer Reference	EE(PROJECT)/YNK ZONE/WO/89/2020-21
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	26-12-2020
Sample Type	Footing
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 28 Days Compressive Strength
Date of Test	23-01-2021
Location	

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Trsting	Dimension of Specification	Cross sectional area	Maximum Load in	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	KN	N/mm^2	N/mm^2
1	Footing	M20	26-12-2020	23-01-2021	150x150x150	22500	706	24.3	25.33
2	Footing	M20	26-12-2020	23-01-2021	150x150x150	22500	699	25.7	
3	Footing	M20	26-12-2020	23-01-2021	150x150x150	22500	703	26.0	

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Customer Reference	EE(PROJECT)/YNK ZONE/WO/89/2020-21
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	26-12-2020
Sample Type	Footing
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 28 Days Compressive Strength
Date of Test	23-01-2021
Location	

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Trsting	Dimension of Specification	Cross sectional area	Maximum Load in	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	KN	N/mm^2	N/mm^2
1	Footing	M20	26-12-2020	23-01-2021	150x150x150	22500	702	26.32	26.02
2	Footing	M20	26-12-2020	23-01-2021	150x150x150	22500	695	25.38	
3	Footing	M20	26-12-2020	23-01-2021	150x150x150	22500	699	26.35	

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Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	26-12-2020
Sample Type	Footing
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 28 Days Compressive Strength
Date of Test	23-01-2021
Location	

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Trsting	Dimension of Specification	Cross sectional area	Maximum Load in	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	KN	N/mm^2	N/mm^2
1	Footing	M20	26-12-2020	23-01-2021	150x150x150	22500	712	25.35	26.06
2	Footing	M20	26-12-2020	23-01-2021	150x150x150	22500	705	26.85	
3	Footing	M20	26-12-2020	23-01-2021	150x150x150	22500	709	25.98	

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Customer Reference	EE(PROJECT)/YNK ZONE/WO/89/2020-21
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	26-12-2020
Sample Type	Footing
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 28 Days Compressive Strength
Date of Test	23-01-2021
Location	

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Trsting	Dimension of Specification	Cross sectional area	Maximum Load in	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	KN	N/mm^2	N/mm^2
1	Footing	M20	26-12-2020	23-01-2021	150x150x150	22500	709	25.4	25.82
2	Footing	M20	26-12-2020	23-01-2021	150x150x150	22500	702	25.7	
3	Footing	M20	26-12-2020	23-01-2021	150x150x150	22500	706	26.4	

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Test Report of Cement Concrete Cubes

IS: 516-1959 (Method of tests for strength of Concrete C1.5) | Date: 25-01-2021

Name of Work : Providing and Fixing LED lights at Yelahanka Division

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. Madhusudhan A N M/s Suraksha Electricals
Customer Reference	EE(PROJECT)/YNK ZONE/WO/89/2020-21
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	28-12-2020
Sample Type	Footing
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 28 Days Compressive Strength
Date of Test	25-01-2021
Location	

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Trsting	Dimension of Specification	Cross sectional area	Maximum Load in	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	KN	N/mm^2	N/mm^2
1	Footing	M20	28-12-2020	25-01-2021	150x150x150	22500	714	24.65	25.77
2	Footing	M20	28-12-2020	25-01-2021	150x150x150	22500	707	25.68	
3	Footing	M20	28-12-2020	25-01-2021	150x150x150	22500	711	26.98	

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Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. Madhusudhan A N M/s Suraksha Electricals
Customer Reference	EE(PROJECT)/YNK ZONE/WO/89/2020-21
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	28-12-2020
Sample Type	Footing
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 28 Days Compressive Strength
Date of Test	25-01-2021
Location	

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Trsting	Dimension of Specification	Cross sectional area	Maximum Load in	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	KN	N/mm^2	N/mm^2
1	Footing	M20	28-12-2020	25-01-2021	150x150x150	22500	720	26.85	26.40
2	Footing	M20	28-12-2020	25-01-2021	150x150x150	22500	713	25.38	
3	Footing	M20	28-12-2020	25-01-2021	150x150x150	22500	717	26.98	

Remarks :

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Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. Madhusudhan A N M/s Suraksha Electricals
Customer Reference	EE(PROJECT)/YNK ZONE/WO/89/2020-21
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	28-12-2020
Sample Type	Footing
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 28 Days Compressive Strength
Date of Test	25-01-2021
Location	

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Trsting	Dimension of Specification	Cross sectional area	Maximum Load in	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	KN	N/mm^2	N/mm^2
1	Footing	M20	28-12-2020	25-01-2021	150x150x150	22500	709	26.34	26.23
2	Footing	M20	28-12-2020	25-01-2021	150x150x150	22500	702	26.38	
3	Footing	M20	28-12-2020	25-01-2021	150x150x150	22500	706	25.97	

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Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. Madhusudhan A N M/s Suraksha Electricals
Customer Reference	EE(PROJECT)/YNK ZONE/WO/89/2020-21
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	28-12-2020
Sample Type	Footing
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 28 Days Compressive Strength
Date of Test	25-01-2021
Location	

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Trsting	Dimension of Specification	Cross sectional area	Maximum Load in	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	KN	N/mm^2	N/mm^2
1	Footing	M20	28-12-2020	25-01-2021	150x150x150	22500	704	25.7	25.93
2	Footing	M20	28-12-2020	25-01-2021	150x150x150	22500	697	25.8	
3	Footing	M20	28-12-2020	25-01-2021	150x150x150	22500	701	26.3	

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Test Report of Physical Properties of Cement-53 Grade

IS: 12269-2013, IS: 4031(Part-4,6)-1988	Date: 23-11-2020

Name of Work : Providing and Fixing LED Lights at Yelahanka Division

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. Madhusudhan A N
Customer Reference	EE(PROJECT)/YNK ZONE/WO/89/2020-21
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Sample Type	Birla Super 53-Grade
Date of Test	23-11-2020
Environmental Condition during test	Temperature: 26°C
	Humidity: 72%

Compressive Strength

Sl. No	Physical Properties	Result	Requirements as per IS: 12269-2013
1	3 Days	28.5 N/mm^2	Not less than 27 N/mm2
2	7 Days	39.0 N/mm^2	Not less than 37 N/mm2
3	28 Days	58.5 N/mm^2	Not less than 53 N/mm2

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Test Report of Fine Aggregate

IS: 383-2016, IS: 2386 (Part-1, 3)-1963 (Reaffirmed-2012) Date: 23-11-2020

Name of Work : Providing and Fixing LED Lights at Yelahanka Division

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. Madhusudhan A N
Customer Reference	EE(PROJECT)/YNK ZONE/WO/89/2020-21
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Sample Type	Fine Aggregate
Date of Test	23-11-2020

Total wt of the sample (gms):	1000

IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per IS: 383-2016			
					Grading Zone-1	Grading Zone-2	Grading Zone-3	Grading Zone-4
10	0	0	0.0	100	100	100	100	100
4.75	27	27	2.7	97.3	90-100	90-100	90-100	95-100
2.36	55	82	8.2	91.8	60-95	75-100	85-100	95-100
1.18	239	321	32.1	67.9	30-70	55-90	75-100	90100
600	205	526	52.6	47.4	15-34	35-59	60-79	80-100
300	203	729	72.9	27.1	5-20	8-30	12-40	15-50
150	191	920	92.0	8.0	0-10	0-10	0-10	0-15
PAN	80	1000	100.0	0.0	-	-	-	-

Result: The Tested Sample Conforms to Grading Zone-II

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Test Report of Fine Aggregate

IS: 383-2016, IS: 2386 (Part-1, 3)-1963 (Reaffirmed-2012)	Date:	23-11-2020

Name of Work : Providing and Fixing LED Lights at Yelahanka Division

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. Madhusudhan A N
Customer Reference	EE(PROJECT)/YNK ZONE/WO/89/2020-21
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Sample Type	Fine Aggregate
Date of Test	23-11-2020

Physical Properties

Sl. No	Physical Properties	Result	Requirements as per IS: 386-2016
1	Water Absorption (%)	1.50	-
2	Specific Gravity	2.59	-
3	Material Finer tha 75 micron (%)	6.90	Uncrushed fine Aggregate Max 3% Crushed Fine Aggregate Max 15% Mixed Fine Aggregate Max 12% Manufacture Fine Aggregate Max 10%

Remarks :

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Test Report of Coarse Aggregate

IS: 383-2016, IS: 2386 (Part-1, 3 & 4)-1963 (Reaffirmed-2012)	Date:	23-11-2020

Name of Work : Providing and Fixing LED Lights at Yelahanka Division

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Yelahanka Zone, Bengaluru.
Contractor	Sri. Madhusudhan A N
Customer Reference	EE(PROJECT)/YNK ZONE/WO/89/2020-21
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Sample Type	Coarse Aggregate
Date of Test	23-11-2020

Sieve Analysis (Particle Size Distribution) of 20mm Down Coarse Aggregate

Total wt of the sample (gms):			5000		
IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per IS: 383-2016
40	0	0	0.0	100	100
20	245	245	4.9	95.1	90-100
10	2560	2805	56.1	43.9	20-55
4.75	2033	4838	96.8	3.2	0-10
PAN	162	5000	100.0	0.0	-

Remarks :

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